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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/616,140	07/13/2000	David Allen Coleman	AUS9-2000-0257-US1	4751

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IBM CORP (YA)  
C/O YEE & ASSOCIATES PC  
P.O. BOX 802333  
DALLAS, TX 75380

EXAMINER
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BLOUNT, STEVEN

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 08/23/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/616,140

**Applicant(s)**

COLEMAN, DAVID ALLEN

**Examiner**

Steven Blount

**Art Unit**

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) 23 - 46 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 - 22, 47 - 49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2661

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 5 and 47 – 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,497,370 to Hamada et al.

With regard to claim 1, note that Hamada teaches receiving input “to” application data stream O (figure 1) and receiving output from the stream based on the input (via the switch on the right side of these members) from device ST1 as well as the other devices ST2, etc. wherein the only output from the application data stream is shared by the devices. Although it is not explicitly stated that the output is provided to the plurality of devices at substantially the same time, the concurrent operation of each of the switches ST1, ST2, etc. would make it obvious to one of ordinary skill in the art that this would be essentially so.

With regard to the following claims (hereinafter referred to as “CI”), see the following: CI 2: the plurality of devices ST1, ST2, etc are “data stream splitters”. CI 3: the data stream splitters provide shared access to the data stream. CI 4 - 5: since each of the members ST1, etc gain access via time division multiplexing (see col 4 lines 15+), they can be considered to be “pseudo” terminals; CI 47: note the combined input from ST1, ST2, etc. via the switches, ultimately leading to output from the application

flow in O; CI 48: see the rejection of claim 1 and claim 47, and note "input to application" data stream O is received via the switches in members ST1, ST2, etc; CI 49: see the rejections above, and note the video devices in figure 2.

3. Claims 6 – 8 and 10 - 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,497,370 to Hamada et al as applied above, and further in view of U.S. patent 6,667,977 to Ono.

With regard to claim 6, Hamada et al teaches the invention as described above, including (in a tdma system), in the transmission equipment, a "subcommunication channel forming function for intra-network management and network structure control purposes and a communication function". See especially col 8 lines 25+.

Hamada et al does not, however, teach cycling through entries in a data stream splitter table to identify entries associated with the data stream splitter, and providing the device and other devices access to the application stream based on this cycling.

Ono teaches (in a tdma system – see col 2 lines 40+) providing information (cells) to the bus from a network, as taught in col 9, line 23, and also scheduling information for transmission via a bus scheduler 51 so that it may be sent out in a cyclical manner (see col 7 lines 5+, col 4 lines 30+, and col 9 lines 18+).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided Hamada with a means for cyclically searching through entries in a splitter/scheduling table in light of the teachings of Ono in order to provide a means for accommodating different priorities for scheduling based on things such as

Art Unit: 2661

different data rates or classes of services and thus provide for a more structured flow of information through the system.

CI 7: see the discussion of the scheduler and that the splitter can be "generated" by being switched on or off; CI 8: the scheduler 51 in Ono is essentially a manager; CI 10: the splitters ST1, etc are transparent to the users; CI 11: see the monitors such as 5a in figure 2; CI 12: see the frame receive buffer in col 16, lines 45+; CI 13: see the rejections above, and additionally note that it would be obvious to add different entries in the scheduling table of Ono for the different splitter devices ST1, etc in Hamada; CI 14: see the rejections above and note that it would be as obvious to operate the system on a character by character basis as any other basis; CI 15: each of the elements in this claim are discussed above; CI 16: note how each of the clients have full access to the data stream; CI 17: note how the output from all of the stream is shared by all; CI 18: note the data splitters ST1, etc., CI 19: note how the splitters dynamically provide shared access to the data stream; CI 20 - 21: note the discussion of a pseudo terminal above; CI 22: the splitter provides non-blocking raw I/O access to the data stream.

4. Claim 9 is allowed.

### ***Response to Arguments***

5. Applicant's arguments filed 6/10/04 have been fully considered but they are not persuasive.

The applicant argues, on page 13, lines 13+, and page 14, lines 27+, that the receiving devices "do not all share an "application data stream". The examiner

disagrees. The examiner believes that in Hamada et al, the act of "separating an input signal from the transmission line into a plurality of receiving transmission channels" (abstract, lines 10+) constitutes sharing the transmission line. With respect to applicants argument that Hamada et al does not teach receiving an output from the application data stream based on the received input and input from the plurality of other devices (page 15, lines 2+), the examiner notes that the output from the application data stream 0 to the plurality of devices ST1, ... is determined based upon the switch input values of ST1, ST2, ... and that the value of the switch at an upstream point (say ST1) will affect the value of the switch at a downstream point (say ST2). Applicants argument with respect to claim 3 is addressed in the rejection of claim 1 above.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2661

7. Examiner Steven Blount may be reached at 703-305-0319 Monday through Friday between the hours of 9:00 and 5:30.

  
Ajit Patel  
Primary Examiner

SB

  
8/19/04